



SEQUENCE LISTING

<110> INSTITUT DE RECHERCHE POUR LE DEVELOPPEMENT (IRD)  
Francisco VEAS

<120> IMMUNOGENIC COMPOSITIONS AND METHODS OF PRODUCING THE SAME

<130> 1721-67 CP/BB 59656-1365

<140> US 10/642,763

<141> 2003-08-19

<150> US 09/913,525

<151> 2001-09-12

<150> PCT/FR00/00375

<151> 2000-02-15

<150> FR 99/01794

<151> 1999-02-15

<160> 23

<170> MS Word

<210> 1

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: CCR-5

<400> 1

ccttccagga attctttggc c

21

<210> 2

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Bac-CCR5

<400> 2

cctgtgggca attctttgtg a

21

<210> 3

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Bac-CCR5

<400> 3

cctgtcgaa attcttttagc c

21

<210> 4  
<211> 21  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Bac-CCR5

<400> 4  
cctgttagta attctctagc c 21

<210> 5  
<211> 21  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Bac-CCR5

<400> 5  
cctgttggga attctctggc c 21

<210> 6  
<211> 21  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Bac-CCR5

<400> 6  
ccttccagga attctctcgc c 21

<210> 7  
<211> 21  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Bac-CCR5

<400> 7  
ccttccagga attctcttgc c 21

<210> 8  
<211> 34  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Bac-CCR5

<400> 8  
ggaaaatatct gtaggcctgt gacatctaga ggtag 34

<210> 9

```

<211> 34
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Bac-CCR5

<400> 9
cacctctaga tgtcacaggc ctacagatat ttcc 34

<210> 10
<211> 40
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: CCR5 C-terminal fragment

<400> 10
aattcaggcc tgcaccatca ccatcatcac taaggatcct 40

<210> 11
<211> 40
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: CCR5 C-terminal fragment

<400> 11
gtccggacgt ggttgtggta gtgtgattc ctaggagatc 40

<210> 12
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: FOR-CD4

<400> 12
cctaagctga tgctgagctt g 21

<210> 13
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: BAC-CD4

<400> 13
cagtggatcc aatggggctg caggtcttct g 31

<210> 14
<211> 33
<212> DNA

```

<213> Artificial Sequence		
<220>		
<223> Description of Artificial Sequence: CD4 C-terminal		
<400> 14		
gccccattca ccatcatcat caccaccatt tag		33
<210> 15		
<211> 38		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Description of Artificial Sequence: CCR5 C-terminal fragment		
<400> 15		
acgtcggggt aagtggtagt agtggtggta attcctag		38
<210> 16		
<211> 38		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Description of Artificial Sequence: CD4-HIS3		
<400> 16		
gatccttaat ggtggtgatg atggtaatg gggctgca		38
<210> 17		
<211> 21		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Description of Artificial Sequence: FOR-CD4		
<400> 17		
cctaaggctga tgctgagctt g		21
<210> 18		
<211> 31		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Description of Artificial Sequence: BAC-CD4		
<400> 18		
cagtggatcc aatggggctg caggtttct g		31
<210> 19		
<211> 30		
<212> DNA		
<213> Artificial Sequence		

```

<220>
<223> Description of Artificial Sequence: CD4-HIS5

<400> 19
gccccatca ccatcatcac caccatttag 30

<210> 20
<211> 38
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: CD4-HIS3

<400> 20
gatccttaat ggtggtgatg atggtaatg gggctgca 38

<210> 21
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: CD4-HIS5

<400> 21
gccccatca ccatcatcac caccatttag 30

<210> 22
<211> 38
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: CD4-HIS3

<400> 22
acgtcggggt aagtggtagt agtggtggtt attcctag 38

<210> 23
<211> 3369
<212> DNA
<213> Homo sapiens

<400> 23
ctcatctggc cagaagagct gagacatccg ttcccctaca agaaactctc cccgggtgga 60
acaagatgga ttatcaagtg tcaagtccaa tctatgacat caattattat acatcgagc 120
cctgc当地 aatcaatgtg aagcaaatcg cagccccgcct cctgc当地ccg ctctactcac 180
tgggtttcat cttgggtttt gtggcaaca tgctggtcat cctcatcctg ataaaactgca 240
aaaggctgaa gagcatgact gacatctacc tgctcaaccc ggccatctct gacctgttt 300
tccttcttac tgcccccttc tgggctcaact atgctgccgc ccagtgggac tttggaaata 360
caatgtgtca actcttgaca gggctctatt ttataggctt cttctctggaa atcttcttca 420
tcatcctcct gacaatcgat aggtacctgg ctgtcgtcca tgctgtttt gctttaaaag 480
ccaggacggt caccttggg gtggtgacaa gtgtgatcac ttgggtggg gctgtgttt 540
cgtctctccc aggaatcatc ttaccagat ctcaaaaaga aggtttcat tacacctgca 600
gctctcattt tccatacagt cagtatcaat tctggaaagaa tttccagaca ttaaagatag 660

```

tcatcttggg gctggtcctg ccgctgcttgc tcatggtcat ctgctactcg ggaatcctaa 720  
 aaactctgt tcggtgtcga aatgagaaga agaggcacag ggctgtgagg cttatctca 780  
 ccatcatgt tgtttatttt ctcttctggg ctcctacaa cattgtcctt ctcctgaaca 840  
 ccttccagga attctttggc ctgaataatt gcagtagctc taacaggttg gaccaagcta 900  
 tgcaggtgac agagactctt gggatgacgc actgctgcat caaccccattt atctatgcct 960  
 ttgtcgggga gaagttcaga aactacatctt tagtcttctt ccaaaggcac attgccaac 1020  
 gcttctgaa atgtgttctt atttccacg aagaggctcc cgagcggca agctcagtt 1080  
 acacccgatc cactggggag cagggaaatattt ctgtgggctt gtgacacgga ctcaagtggg 1140  
 ctggtgaccc agtcagagtt gtgcacatgg cttagttttc atacacagcc tgggctgggg 1200  
 gtgggggtggg agaggtcttt tttaaaaagga agttactgtt atagagggtc taagattcat 1260  
 ccattttttt ggcattctgtt taaagtagat tagatctttt aagcccatca attatagaaa 1320  
 gccaaatcaa aatatgttga tggaaaatag caacctttt atctcccctt cacatgcac 1380  
 aagttatgttga caaactctcc cttcactccg aaagttcctt atgtatattt aaaagaaaagc 1440  
 ctcagagaat tgctgattctt tgagtttagt gatctgaaca gaaataccaa aattatttca 1500  
 gaaatgtaca actttttacc tagtacaagg caacatataag gttgtaaatg tggtaaaaac 1560  
 aggtcttcttgt ctgtctatgg ggagaaaaaga catgaatatgtt attagtaaag aatgacact 1620  
 tttcatgtgt gattttccctt ccaaggatgt gtaataaagt ttcaactgact tagaaccagg 1680  
 cgagagactt gtggcctggg agagctgggg aagcttcttta aatgagaagg aattttgagg 1740  
 ggcattcttta ttgtctggcaa agacagaagc ctcactgca gcaactgcattt ggcaggctt 1800  
 gctgtagaag gagacagagc tgggttggggaa gacatggggaa ggaaggacaa ggctagatca 1860  
 tgaagaacct tgacggcatt gctccgtcta agtcatgagc tgagcaggga gatcctgggtt 1920  
 ggtgttgcag aaggtttact ctgtggccaa aggagggtca ggaaggatgtt gcatcttaggg 1980  
 caaggagacc accaacacgac ctcaggtcag ggtgaggatgtt ggcctctgcta agctcaaggc 2040  
 gtgaggatgg gaaggaggaa ggtattcgta aggtggggaa ggaggaggatgtt attcgtgcag 2100  
 catatgagga tgcagagtca gcagaactgg ggtggatttg ggttggaaatgtt gagggtcaga 2160  
 gaggagtcag agagaatccc tagtcttcaa gcagattggaa gaaacccttggaaaagacatc 2220  
 aagcacagaa ggaggaggaa gaggtttagt tcaagaagaaa gatggattgg tggtaaaaagga 2280  
 tgggtctgtt ttgcagagct tgaacacagt ctcacccaga ctccaggctt gctttcactt 2340  
 aatgcttcttgc acttcataga tttccttccc atccccagctt gatggattgtt gggctccag 2400  
 gaggagacta gatttatgaa tacacgaggt atgagggtctt ggaacataact tcaactcaca 2460  
 catgagatct aggtgaggat tgaattaccta gtatgttcat tgggttgcatt tgggaggatt 2520  
 ctatgaggca accacaggca gcatttagca catactacac attcaataag catcaaactc 2580  
 ttagttactt attcaggat agcaactgagc aaagcattga gcaaaagggtt cccatagagg 2640  
 tgagggaaagc ctgaaaaactt aagatgtgc ctggcccagttt cacacaagtg taggtatcat 2700  
 tttctgcatt taaccgtcaa taggcaaaagg ggggaaggaa catattcatt tggaaataag 2760  
 ctgccttggag ccttaaaaacc cacaaggta caatttacca gcctccgtat ttcagactga 2820  
 atgggggtgg gggggcgcc ttaggtactt attccagatg cttctccag acaaaccaga 2880  
 agcaacagaa aaaatctgtt ctccctccctt tggaaatgaa tataccccctt agtgggggg 2940  
 tatatttattt tcaaaaggag agagagaggat tttttctgt tctgtctcat atgattgtgc 3000  
 acatacttga gactgtttt aatttggggg atggctaaaa ccatcatagt acaggttaagg 3060  
 tgagggaaata gtaagtgggtt agaactactc agggaaatgaa ggtgtcagaa taataagagg 3120  
 tgctactgac ttctcagcc tctgaatatgtt aacgggtgagc attgtggctt tcaacggaa 3180  
 gcaacgaagg gaaatgtctt tccttttgct ctaaggatgtt ggagagtgca acagtagat 3240  
 aggaccctac cctctggggcc aagtcaaaaga cattctgaca tcttagtattt tgcattttct 3300  
 tatgtatgtt gaaatgttacaa attgttttgc gaaatgttgc catctaataa aaaacacott 3360  
 ctaaaaataa 3369